



SEQUENCE LISTING

<110> MedImmune Vaccines, Inc.
Cheng, Xing
Park, Hyun J
Jin, Hong

<120> COMPOSITIONS AND METHODS INVOLVING RESPIRATORY SYNCYTIAL VIRUS SUBGROUP B STRAIN 9320

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<170> PatentIn version 3.1

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aaaaattgtt	tccacaat	ctaagtgtca	attatttaca	ccgcttaaca	gtcagtagta	12540
ggccatgtca	attccctgca	tcaataccag	cttataaga	aacaaattat	catttcgata	12600
ctagtcctat	caatcatgt	ttaacagaaa	agtatggaga	tgaagatatc	gacatgtgt	12660
ttcaaaatttgc	cataagtttgc	ggtcttagcc	taatgtcggt	tgtggaa	acaaatcata	12720
tatgtcctaa	tagaatttgc	ctcataccg	agctgaatgc	gatacatttgc	atgaaacatc	12780

ctatatttac	aggagatgtt	gatatcatca	aattgaagca	agtgatacaa	aaacagcaca	12840
tgttcctacc	agataaaaata	agtttaaccc	aatatgtaga	attattccta	agtaacaaag	12900
cacttaaattc	tggatctcac	atcaactcta	attaatatt	agtacataaa	atgtctgatt	12960
attttcataa	tgattatatt	ttaagtacta	attagctgg	acattggatt	ctgattattc	13020
aacttatgaa	agattcaaaa	ggtatTTTg	aaaaagattg	gggagagggg	tatataactg	13080
atcatatgtt	cattaatttgc	aatgtttct	ttaatgctta	taagacttat	ttgctatgtt	13140
ttcataaagg	ttatggtaaa	gcaaaattag	aatgtgat	gaacacttca	gatcttctt	13200
gtgtttgga	gttaatagac	agtagctact	gaaatctat	gtctaaagtt	ttcctagaac	13260
agaaaagtcat	aaaatacata	gtcaatcaag	acacaagttt	gcatagaata	aaaggttgc	13320
atagttttaa	gttgtggttt	ttaaaacgcc	ttaataatgc	taaatttacc	gtatgccctt	13380
gggtgtttaa	catagattat	cacccaacac	acatgaaagc	tatattatct	tacatagatt	13440
tagttagaat	ggggtaataa	aatgttagata	aattaaccat	taaaaataaa	aacaattca	13500
atgatgaatt	ttacacatca	aatctcttt	atattagtt	taactttca	gacaacactc	13560
atttgctaac	aaaacaaaata	agaattgcta	attcagaatt	agaaaataat	tataacaaac	13620
tatatcaccc	aacccagaa	actttagaaa	atatgtcatt	aattcctgtt	aaaagtaaca	13680
atagtaacaa	acctaaatct	tgtataagtg	gaaataccga	atctatgatg	acgtcaacat	13740
tctccaataa	aatgcatatt	aatcttcca	ctgttaccac	aagattaaac	tatagcaaac	13800
aagacttgc	caatttattt	ccaatttgc	tgatagacag	gattatagat	cattcagga	13860
atacagcaaa	atccaaccaa	cttacacca	ccacttcaca	tcagacatct	ttagtaagga	13920
atagtgcattc	actttattgc	atgcttcctt	ggcatcatgt	caatagattt	aactttgtat	13980
ttagttccac	aggatgcaag	atcagttatag	agtatatttt	aaaagatctt	aagattaagg	14040
accccagttt	tatagcattc	ataggtgaag	gagctggtaa	cttatttattt	cgtacggtag	14100
tagaacttca	tccagacata	agatacattt	acagaagttt	aaaagattgc	aatgatcata	14160
gtttacctat	tgaatttcta	aggttataca	acgggcataat	aaacatagat	tatggtgaga	14220
atthaaccat	tcctgctaca	gatgcaacta	ataacattca	ttggtcttat	ttacatataaa	14280
aatttgccaga	acctatttagc	atcttgc	gcgatgctga	attacctgtt	acagccaatt	14340
ggagtaaaat	tataattgaa	tggagtaagc	atgtaagaaa	gtgcaagtac	tgccctctg	14400
taaaatagatg	catttaatt	gcaaaatatc	atgctcaaga	tgatattgtat	ttcaaattag	14460
ataacattac	tatattaaaa	acttatgtgt	gcctaggtag	caagttaaaa	ggatctgaag	14520
tttacttagt	ccttacaata	ggcccttcaa	atatacttcc	tgttttaat	gttgcgaaa	14580
atgctaaatt	gattttca	agaactaaaa	atttcattat	gcctaaaaaa	actgacaaag	14640
aatctatcga	tgcaaataatt	aaaagctaa	taccttcctt	ttgttaccct	ataacaaaaaa	14700
aaggaattaa	gacttcattt	tcaaaatga	agagtgttagt	taatggagat	atattatcat	14760
attctatagc	tggacgtaat	gaagtattca	gcaacaagct	tataaaccac	aagcatatga	14820
atatcctaaa	atggctagat	catgtttaa	actttagatc	aactgaactt	attacaatc	14880
atttatatat	gatagagtcc	acatatcctt	acttaagtga	attgtttaat	agtttaacaa	14940
ccaatgagct	caaaaagctg	attaaaatta	caggtgtgt	actataacaac	cttcccaatg	15000
aacagtaact	taaaatatca	ttaacaagtt	tggtcaaatt	tagatgctaa	cacatcatta	15060
tattatagtt	attaaaaaaat	atgcaaactt	ttcaataatt	tagcatattt	attccaaaat	15120
tatctatTTT	ggtcttaagg	ggtaaataaa	aaatctaaaa	ctaacaatta	tacatgtgca	15180
tttacaacac	aacgagacat	tagtttgc	cactttttt	ctcgt		15225

<210> 2
 <211> 139
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 2

Met Gly Cys Asn Ser Leu Ser Met Ile Lys Val Arg Leu Gln Asn Leu
 1 5 10 15
 Phe Asp Asn Asp Glu Val Ala Leu Leu Lys Ile Thr Cys Tyr Thr Asp
 20 25 30
 Lys Leu Ile Leu Leu Thr Asn Ala Leu Ala Lys Ala Ala Ile His Thr
 35 40 45
 Ile Lys Leu Asn Gly Ile Val Phe Ile His Val Ile Thr Ser Ser Glu
 50 55 60
 Val Cys Pro Asp Asn Asn Ile Val Val Lys Ser Asn Phe Thr Thr Met
 65 70 75 80
 Pro Ile Leu Gln Asn Gly Gly Tyr Ile Trp Glu Leu Ile Glu Leu Thr

	85	90	95
His Cys Ser Gln Leu Asn Gly Leu Met Asp Asp Asn Cys Glu Ile Lys	100	105	110
Phe Ser Lys Arg Leu Ser Asp Ser Val Met Thr Asp Tyr Met Asn Gln	115	120	125
Ile Ser Asp Leu Leu Gly Leu Asp Leu Asn Ser	130	135	

<210> 3
 <211> 124
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 3

Met Ser Thr Thr Asn Asn Asn Thr Thr Met Gln Arg Leu Met Ile Thr	1	5	10	15
Asp Met Arg Pro Leu Ser Met Glu Ser Ile Ile Thr Ser Leu Thr Lys	20	25	30	
Glu Ile Ile Thr His Lys Phe Ile Tyr Leu Ile Asn Asn Glu Cys Ile	35	40	45	
Val Arg Lys Leu Asp Glu Arg Gln Ala Thr Phe Thr Phe Leu Val Asn	50	55	60	
Tyr Glu Met Lys Leu Leu His Lys Val Gly Ser Thr Lys Tyr Lys Lys	65	70	75	80
Tyr Thr Glu Tyr Asn Thr Lys Tyr Gly Thr Phe Pro Met Pro Ile Phe	85	90	95	
Ile Asn His Gly Gly Phe Leu Glu Cys Ile Gly Ile Lys Pro Thr Lys	100	105	110	
His Thr Pro Ile Ile Tyr Lys Tyr Asp Leu Asn Pro	115	120		

<210> 4
 <211> 391
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 4

Met Ala Leu Ser Lys Val Lys Leu Asn Asp Thr Leu Asn Lys Asp Gln	1	5	10	15
Leu Leu Ser Ser Ser Lys Tyr Thr Ile Gln Arg Ser Thr Gly Asp Asn	20	25	30	
Ile Asp Thr Pro Asn Tyr Asp Val Gln Lys His Leu Asn Lys Leu Cys	35	40	45	
Gly Met Leu Leu Ile Thr Glu Asp Ala Asn His Lys Phe Thr Gly Leu	50	55	60	
Ile Gly Met Leu Tyr Ala Met Ser Arg Leu Gly Arg Glu Asp Thr Ile	65	70	75	80
Lys Ile Leu Lys Asp Ala Gly Tyr His Val Lys Ala Asn Gly Val Asp	85	90	95	
Ile Thr Thr Tyr Arg Gln Asp Ile Asn Gly Lys Glu Met Lys Phe Glu	100	105	110	
Val Leu Thr Leu Ser Ser Leu Thr Ser Glu Ile Gln Val Asn Ile Glu	115	120	125	
Ile Glu Ser Arg Lys Ser Tyr Lys Lys Met Leu Lys Glu Met Gly Glu	130	135	140	
Val Ala Pro Glu Tyr Arg His Asp Ser Pro Asp Cys Gly Met Ile Ile				

145	150	155	160
Leu Cys Ile Ala Ala Leu Val Ile Thr Lys	Leu Ala Ala Gly Asp Arg		
165	170	175	
Ser Gly Leu Thr Ala Val Ile Arg Arg Ala Asn Asn Val	Leu Lys Asn		
180	185	190	
Glu Ile Lys Arg Tyr Lys Gly Leu Ile Pro Lys Asp Ile	Ala Asn Ser		
195	200	205	
Phe Tyr Glu Val Phe Glu Lys His Pro His Leu Ile Asp	Val Phe Val		
210	215	220	
His Phe Gly Ile Ala Gln Ser Ser Thr Arg Gly	Gly Ser Arg Val Glu		
225	230	235	240
Gly Ile Phe Ala Gly Leu Phe Met Asn Ala Tyr Gly Ser	Gly Gln Val		
245	250	255	
Met Leu Arg Trp Gly Val Leu Ala Lys Ser Val Lys Asn	Ile Met Leu		
260	265	270	
Gly His Ala Ser Val Gln Ala Glu Met Glu Gln Val	Val Val Glu Val Tyr		
275	280	285	
Glu Tyr Ala Gln Lys Leu Gly Gly Glu Ala Gly Phe	Tyr His Ile Leu		
290	295	300	
Asn Asn Pro Lys Ala Ser Leu Leu Ser Leu Thr Gln Phe	Pro Asn Phe		
305	310	315	320
Ser Ser Val Val Leu Gly Asn Ala Ala Gly Leu Gly	Ile Met Gly Glu		
325	330	335	
Tyr Arg Gly Thr Pro Arg Asn Gln Asp Leu Tyr Asp Ala	Ala Lys Ala		
340	345	350	
Tyr Ala Glu Gln Leu Lys Glu Asn Gly Val Ile Asn	Tyr Ser Val Leu		
355	360	365	
Asp Leu Thr Ala Glu Glu Leu Glu Ala Ile Lys His	Gln Leu Asn Pro		
370	375	380	
Lys Glu Asp Asp Val Glu Leu			
385	390		

<210> 5
 <211> 241
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 5

Met Glu Lys Phe Ala Pro Glu Phe His Gly Glu Asp Ala Asn Asn Lys			
1	5	10	15
Ala Thr Lys Phe Leu Glu Ser Ile Lys Gly Lys Phe Ala Ser Ser Lys			
20	25	30	
Asp Pro Lys Lys Lys Asp Ser Ile Ile Ser Val Asn Ser Ile Asp Ile			
35	40	45	
Glu Val Thr Lys Glu Ser Pro Ile Thr Ser Gly Thr Asn Ile Asn Asn			
50	55	60	
Pro Thr Ser Glu Ala Asp Ser Thr Pro Glu Ala Lys Thr Asn Tyr Pro			
65	70	75	80
Arg Lys Pro Leu Val Ser Phe Lys Glu Asp Leu Thr Pro Ser Asp Asn			
85	90	95	
Pro Phe Ser Lys Leu Tyr Lys Glu Thr Ile Glu Thr Phe Asp Asn Asn			
100	105	110	
Glu Glu Glu Ser Ser Tyr Ser Tyr Glu Glu Ile Asn Asp Gln Thr Asn			
115	120	125	
Asp Asn Ile Thr Ala Arg Leu Asp Arg Ile Asp Glu Lys Leu Ser Glu			
130	135	140	
Ile Leu Gly Met Leu His Thr Leu Val Val Ala Ser Ala Gly Pro Thr			
145	150	155	160
Ser Ala Arg Asp Gly Ile Arg Asp Ala Met Val Gly Leu Arg Glu Glu			

165	170	175
Met Ile Glu Lys Ile Arg Ala Glu Ala	Leu Met Thr Asn Asp Arg	Leu
180	185	190
Glu Ala Met Ala Arg Leu Arg Asn Glu	Glu Ser Glu Lys Met Ala Lys	
195	200	205
Asp Thr Ser Asp Glu Val Ser Leu Asn	Pro Thr Ser Lys Lys Leu Ser	
210	215	220
Asp Leu Leu Glu Asp Asn Asp Ser Asp	Asn Asp Leu Ser Leu Asp Asp	
225	230	235
Phe		240

<210> 6
<211> 256
<212> PRT
<213> respiratory syncytial virus B 9320

<400> 6

Met Glu Thr Tyr Val Asn Lys Leu His	Glu Gly Ser Thr Tyr Thr Ala	
1 5	10	15
Ala Val Gln Tyr Asn Val Leu Glu	Lys Asp Asp Asp Pro Ala Ser	Leu
20	25	30
Thr Ile Trp Val Pro Met Phe Gln	Ser Ser Val Pro Ala Asp Leu	Leu
35	40	45
Ile Lys Glu Leu Ala Ser Ile Asn	Ile Leu Val Lys Gln Ile Ser	Thr
50	55	60
Pro Lys Gly Pro Ser Leu Arg Val	Thr Ile Asn Ser Arg Ser Ala	Val
65 70	75	80
Leu Ala Gln Met Pro Ser Asn Phe	Ile Ile Ser Ala Asn Val Ser	Leu
85	90	95
Asp Glu Arg Ser Lys Leu Ala Tyr	Asp Val Thr Thr Pro Cys	Glu Ile
100	105	110
Lys Ala Cys Ser Leu Thr Cys	Leu Lys Val Lys Ser Met	Leu Thr Thr
115	120	125
Val Lys Asp Leu Thr Met Lys	Thr Phe Asn Pro Thr His	Glu Ile Ile
130	135	140
Ala Leu Cys Glu Phe Glu Asn	Ile Met Thr Ser Lys Arg Val	Ile Ile
145	150	155
Pro Thr Tyr Leu Arg Ser Ile	Ser Val Lys Asn Lys Asp	Leu Asn Ser
165	170	175
Leu Glu Asn Ile Ala Thr Thr	Glu Phe Lys Asn Ala Ile	Thr Asn Ala
180	185	190
Lys Ile Ile Pro Tyr Ala Gly	Leu Val Leu Val Ile	Thr Val Thr Asp
195	200	205
Asn Lys Gly Ala Phe Lys Tyr	Ile Lys Pro Gln Ser Gln	Phe Ile Val
210	215	220
Asp Leu Gly Ala Tyr Leu Glu	Lys Glu Ser Ile Tyr Tyr	Val Thr Thr
225	230	235
Asn Trp Lys His Thr Ala Thr	Arg Phe Ser Ile Lys Pro	Leu Glu Asp
245	250	255

<210> 7
<211> 65
<212> PRT
<213> respiratory syncytial virus B 9320

<400> 7

Met Gly Asn Thr Ser Ile Thr Ile Glu	Phe Thr Ser Lys Phe Trp Pro	
1 5	10	15

Tyr	Phe	Thr	Leu	Ile	His	Met	Ile	Leu	Thr	Leu	Ile	Ser	Leu	Leu	Ile
						20			25						30
Ile	Ile	Thr	Ile	Met	Ile	Ala	Ile	Leu	Asn	Lys	Leu	Ser	Glu	His	Lys
						35			40					45	
Thr	Phe	Cys	Asn	Lys	Thr	Leu	Glu	Leu	Gly	Gln	Met	Tyr	Gln	Ile	Asn
						50			55					60	
Thr															
														65	

<210> 8
 <211> 574
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 8

Met	Glu	Leu	Leu	Ile	His	Arg	Ser	Ser	Ala	Ile	Phe	Leu	Thr	Leu	Ala	
1				5					10						15	
Ile	Asn	Ala	Leu	Tyr	Leu	Thr	Ser	Ser	Gln	Asn	Ile	Thr	Glu	Glu	Phe	
				20					25					30		
Tyr	Gln	Ser	Thr	Cys	Ser	Ala	Val	Ser	Arg	Gly	Tyr	Phe	Ser	Ala	Leu	
				35					40					45		
Arg	Thr	Gly	Trp	Tyr	Thr	Ser	Val	Ile	Thr	Ile	Glu	Leu	Ser	Asn	Ile	
				50					55					60		
Lys	Glu	Thr	Lys	Cys	Asn	Gly	Thr	Asp	Thr	Lys	Val	Lys	Leu	Ile	Lys	
65					70					75					80	
Gln	Glu	Leu	Asp	Lys	Tyr	Lys	Asn	Ala	Val	Thr	Glu	Leu	Gln	Leu	Leu	
					85					90					95	
Thr	Gln	Asn	Thr	Pro	Ala	Ala	Asn	Asn	Arg	Ala	Arg	Arg	Glu	Ala	Pro	
					100					105					110	
Gln	Tyr	Met	Asn	Tyr	Thr	Ile	Asn	Thr	Thr	Lys	Asn	Leu	Asn	Val	Ser	
					115					120					125	
Ile	Ser	Lys	Lys	Arg	Lys	Arg	Arg	Phe	Leu	Gly	Phe	Leu	Leu	Gly	Val	
					130					135					140	
Gly	Ser	Ala	Ile	Ala	Ser	Gly	Ile	Ala	Val	Ser	Lys	Val	Leu	His	Leu	
145						150					155					160
Glu	Gly	Glu	Val	Asn	Lys	Ile	Lys	Asn	Ala	Leu	Leu	Ser	Thr	Asn	Lys	
					165					170					175	
Ala	Val	Val	Ser	Leu	Ser	Asn	Gly	Val	Ser	Val	Leu	Thr	Ser	Lys	Val	
					180					185					190	
Leu	Asp	Leu	Lys	Ser	Tyr	Ile	Asn	Asn	Gln	Leu	Leu	Pro	Ile	Val	Asn	
					195					200					205	
Gln	Gln	Ser	Cys	Arg	Ile	Ser	Asn	Ile	Glu	Thr	Val	Ile	Glu	Phe	Gln	
					210					215					220	
Gln	Lys	Asn	Ser	Arg	Leu	Leu	Glu	Ile	Thr	Arg	Glu	Phe	Ser	Val	Asn	
225						230					235					240
Ala	Gly	Val	Thr	Thr	Pro	Leu	Ser	Thr	Tyr	Met	Leu	Thr	Asn	Ser	Glu	
						245					250					255
Leu	Leu	Ser	Leu	Ile	Asn	Asp	Met	Pro	Ile	Thr	Asn	Asp	Gln	Lys	Lys	
						260					265					270
Leu	Met	Ser	Ser	Asn	Val	Gln	Ile	Val	Arg	Gln	Gln	Ser	Tyr	Ser	Ile	
						275					280					285
Met	Ser	Ile	Ile	Lys	Glu	Glu	Val	Leu	Ala	Tyr	Val	Val	Gln	Leu	Pro	
						290					295					300
Ile	Tyr	Gly	Val	Ile	Asp	Thr	Pro	Cys	Trp	Lys	Leu	His	Thr	Ser	Pro	
305						310					315					320
Leu	Cys	Thr	Thr	Asn	Ile	Lys	Glu	Gly	Ser	Asn	Ile	Cys	Leu	Thr	Arg	
						325					330					335
Thr	Asp	Arg	Gly	Trp	Tyr	Cys	Asp	Asn	Ala	Gly	Ser	Val	Ser	Phe	Phe	
						340					345					350

Pro Gln Ala Asp Thr Cys Lys Val Gln Ser Asn Arg Val Phe Cys Asp
 355 360 365
 Thr Met Asn Ser Leu Thr Leu Pro Ser Glu Val Ser Leu Cys Asn Thr
 370 375 380
 Asp Ile Phe Asn Ser Lys Tyr Asp Cys Lys Ile Met Thr Ser Lys Thr
 385 390 395 400
 Asp Ile Ser Ser Ser Val Ile Thr Ser Leu Gly Ala Ile Val Ser Cys
 405 410 415
 Tyr Gly Lys Thr Lys Cys Thr Ala Ser Asn Lys Asn Arg Gly Ile Ile
 420 425 430
 Lys Thr Phe Ser Asn Gly Cys Asp Tyr Val Ser Asn Lys Gly Val Asp
 435 440 445
 Thr Val Ser Val Gly Asn Thr Leu Tyr Tyr Val Asn Lys Leu Glu Gly
 450 455 460
 Lys Asn Leu Tyr Val Lys Gly Glu Pro Ile Ile Asn Tyr Tyr Asp Pro
 465 470 475 480
 Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn
 485 490 495
 Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Arg Ser Asp Glu Leu
 500 505 510
 Leu His Asn Val Asn Thr Gly Lys Ser Thr Thr Asn Ile Met Ile Thr
 515 520 525
 Thr Ile Ile Ile Val Ile Ile Val Val Leu Leu Ser Leu Ile Ala Ile
 530 535 540
 Gly Leu Leu Leu Tyr Cys Lys Ala Lys Asn Thr Pro Val Thr Leu Ser
 545 550 555 560
 Lys Asp Gln Leu Ser Gly Ile Asn Asn Ile Ala Phe Ser Lys
 565 570

<210> 9
 <211> 195
 <212> PRT
 <213> respiratory syncytial virus B 9320

<400> 9

Met Ser Arg Arg Asn Pro Cys Lys Phe Glu Ile Arg Gly His Cys Leu
 1 5 10 15
 Asn Gly Arg Arg Cys His Tyr Ser His Asn Tyr Phe Glu Trp Pro Pro
 20 25 30
 His Ala Leu Leu Val Arg Gln Asn Phe Met Leu Asn Lys Ile Leu Lys
 35 40 45
 Ser Met Asp Lys Ser Ile Asp Thr Leu Ser Glu Ile Ser Gly Ala Ala
 50 55 60
 Glu Leu Asp Arg Thr Glu Glu Tyr Ala Leu Gly Ile Val Gly Val Leu
 65 70 75 80
 Glu Ser Tyr Ile Gly Ser Ile Asn Asn Ile Thr Lys Gln Ser Ala Cys
 85 90 95
 Val Ala Met Ser Lys Leu Leu Ile Glu Ile Asn Ser Asp Asp Ile Lys
 100 105 110
 Lys Leu Arg Asp Asn Glu Glu Pro Asn Ser Pro Lys Ile Arg Val Tyr
 115 120 125
 Asn Thr Val Ile Ser Tyr Ile Glu Ser Asn Arg Lys Asn Asn Lys Gln
 130 135 140
 Thr Ile His Leu Leu Lys Arg Leu Pro Ala Asp Val Leu Lys Lys Thr
 145 150 155 160
 Ile Lys Asn Thr Leu Asp Ile His Lys Ser Ile Thr Ile Ser Asn Pro
 165 170 175
 Lys Glu Ser Thr Val Asn Asp Gln Asn Asp Gln Thr Lys Asn Asn Asp
 180 185 190

Ile Thr Gly
195

<210> 10
<211> 93
<212> PRT
<213> respiratory syncytial virus B 9320

<400> 10

Met Ile Lys Met Thr Lys Pro Lys Ile Met Ile Leu Pro Asp Lys Tyr
1 5 10 15
Pro Cys Ser Ile Ser Ser Ile Leu Ile Ser Ser Glu Ser Met Val Ala
20 25 30
Thr Phe Asn His Lys Asn Ile Leu Gln Phe Asn His Asn His Leu Asp
35 40 45
Asn His Gln Cys Leu Leu Asn His Ile Phe Asp Glu Ile His Trp Thr
50 55 60
Pro Lys Asn Leu Leu Asp Thr Thr Gln Gln Phe Leu Gln His Leu Asn
65 70 75 80
Ile Pro Glu Asp Ile Tyr Thr Val Tyr Ile Leu Val Ser
85 90

<210> 11
<211> 2166
<212> PRT

<213> respiratory syncytial virus B 9320

<400> 11

Met Asp Pro Ile Ile Asn Gly Asn Ser Ala Asn Val Tyr Leu Thr Asp
1 5 10 15
Ser Tyr Leu Lys Gly Val Ile Ser Phe Ser Glu Cys Asn Ala Leu Gly
20 25 30
Ser Tyr Leu Phe Asn Gly Pro Tyr Leu Lys Asn Asp Tyr Thr Asn Leu
35 40 45
Ile Ser Arg Gln Ser Pro Leu Leu Glu His Met Asn Leu Lys Lys Leu
50 55 60
Thr Ile Thr Gln Ser Leu Ile Ser Arg Tyr His Lys Gly Glu Leu Lys
65 70 75 80
Leu Glu Glu Pro Thr Tyr Phe Gln Ser Leu Leu Met Thr Tyr Lys Ser
85 90 95
Met Ser Ser Ser Glu Gln Ile Ala Thr Thr Asn Leu Leu Lys Lys Ile
100 105 110
Ile Arg Arg Ala Ile Glu Ile Ser Asp Val Lys Val Tyr Ala Ile Leu
115 120 125
Asn Lys Leu Gly Leu Lys Glu Lys Asp Arg Val Lys Pro Asn Asn Asn
130 135 140
Ser Gly Asp Glu Asn Ser Val Leu Thr Thr Ile Ile Lys Asp Asp Ile
145 150 155 160
Leu Ser Ala Val Glu Asn Asn Gln Ser Tyr Thr Asn Ser Asp Lys Asn
165 170 175
His Ser Val Asn Gln Asn Ile Thr Ile Lys Thr Thr Leu Leu Lys Lys
180 185 190
Leu Met Cys Ser Met Gln His Pro Pro Ser Trp Leu Ile His Trp Phe
195 200 205
Asn Leu Tyr Thr Lys Leu Asn Asn Ile Leu Thr Gln Tyr Arg Ser Asn
210 215 220

Glu Val Lys Ser His Gly Phe Ile Leu Ile Asp Asn Gln Thr Leu Ser
 225 230 235 240
 Gly Phe Gln Phe Ile Leu Asn Gln Tyr Gly Cys Ile Val Tyr His Lys
 245 250 255
 Gly Leu Lys Lys Ile Thr Thr Thr Tyr Asn Gln Phe Leu Thr Trp
 260 265 270
 Lys Asp Ile Ser Leu Ser Arg Leu Asn Val Cys Leu Ile Thr Trp Ile
 275 280 285
 Ser Asn Cys Leu Asn Thr Leu Asn Lys Ser Leu Gly Leu Arg Cys Gly
 290 295 300
 Phe Asn Asn Val Val Leu Ser Gln Leu Phe Leu Tyr Gly Asp Cys Ile
 305 310 315 320
 Leu Lys Leu Phe His Asn Glu Gly Phe Tyr Ile Ile Lys Glu Val Glu
 325 330 335
 Gly Phe Ile Met Ser Leu Ile Leu Asn Ile Thr Glu Glu Asp Gln Phe
 340 345 350
 Arg Thr Arg Phe Tyr Asn Ser Met Leu Asn Asn Ile Thr Asp Ala Ala
 355 360 365
 Ile Lys Ala Gln Lys Asn Leu Leu Ser Arg Val Cys His Thr Leu Leu
 370 375 380
 Asp Lys Thr Val Ser Asp Asn Ile Ile Asn Gly Lys Trp Ile Ile Leu
 385 390 395 400
 Leu Ser Lys Phe Leu Lys Leu Ile Lys Leu Ala Gly Asp Asn Asn Leu
 405 410 415
 Asn Asn Leu Ser Glu Leu Tyr Phe Leu Phe Arg Ile Phe Gly His Pro
 420 425 430
 Met Val Asp Glu Arg Gln Ala Met Asp Ala Val Arg Ile Asn Cys Asn
 435 440 445
 Glu Thr Lys Phe Tyr Leu Leu Ser Ser Leu Ser Thr Leu Arg Gly Ala
 450 455 460
 Phe Ile Tyr Arg Ile Ile Lys Gly Phe Val Asn Thr Tyr Asn Arg Trp
 465 470 475 480
 Pro Thr Leu Arg Asn Ala Ile Val Leu Pro Leu Arg Trp Leu Asn Tyr
 485 490 495
 Tyr Lys Leu Asn Thr Tyr Pro Ser Leu Leu Glu Ile Thr Glu Asn Asp
 500 505 510
 Leu Ile Ile Leu Ser Gly Leu Arg Phe Tyr Arg Glu Phe His Leu Pro
 515 520 525
 Lys Lys Val Asp Leu Glu Met Ile Ile Asn Asp Lys Ala Ile Ser Pro
 530 535 540
 Pro Lys Asp Leu Ile Trp Thr Ser Phe Pro Arg Asn Tyr Met Pro Ser
 545 550 555 560
 His Ile Gln Asn Tyr Ile Glu His Glu Lys Leu Lys Phe Ser Glu Ser
 565 570 575
 Asp Arg Ser Arg Arg Val Leu Glu Tyr Tyr Leu Arg Asp Asn Lys Phe
 580 585 590
 Asn Glu Cys Asp Leu Tyr Asn Cys Val Val Asn Gln Ser Tyr Leu Asn
 595 600 605
 Asn Ser Asn His Val Val Ser Leu Thr Gly Lys Glu Arg Glu Leu Ser
 610 615 620
 Val Gly Arg Met Phe Ala Met Gln Pro Gly Met Phe Arg Gln Ile Gln
 625 630 635 640
 Ile Leu Ala Glu Lys Met Ile Ala Glu Asn Ile Leu Gln Phe Phe Pro
 645 650 655
 Glu Ser Leu Thr Arg Tyr Gly Asp Leu Glu Leu Gln Lys Ile Leu Glu
 660 665 670
 Leu Lys Ala Gly Ile Ser Asn Lys Ser Asn Arg Tyr Asn Asp Asn Tyr
 675 680 685
 Asn Asn Tyr Ile Ser Lys Cys Ser Ile Ile Thr Asp Leu Ser Lys Phe
 690 695 700
 Asn Gln Ala Phe Arg Tyr Glu Thr Ser Cys Ile Cys Ser Asp Val Leu

705	710	715	720
Asp Glu Leu His Gly Val Gln Ser Leu Phe Ser Trp Leu His Leu Thr			
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Ile Pro Leu Val Thr Ile Ile Cys Thr Tyr Arg His Ala Pro Pro Phe			
740	745	750	
Ile Lys Asp His Val Val Asn Leu Asn Glu Val Asp Glu Gln Ser Gly			
755	760	765	
Leu Tyr Arg Tyr His Met Gly Gly Ile Glu Gly Trp Cys Gln Lys Leu			
770	775	780	
Trp Thr Ile Glu Ala Ile Ser Leu Leu Asp Leu Ile Ser Leu Lys Gly			
785	790	795	800
Lys Phe Ser Ile Thr Ala Leu Ile Asn Gly Asp Asn Gln Ser Ile Asp			
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Ile Ser Lys Pro Val Arg Leu Ile Glu Gly Gln Thr His Ala Gln Ala			
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Asp Tyr Leu Leu Ala Leu Asn Ser Leu Lys Leu Leu Tyr Lys Glu Tyr			
835	840	845	
Ala Gly Ile Gly His Lys Leu Lys Gly Thr Glu Thr Tyr Ile Ser Arg			
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Asp Met Gln Phe Met Ser Lys Thr Ile Gln His Asn Gly Val Tyr Tyr			
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Pro Ala Ser Ile Lys Lys Val Leu Arg Val Gly Pro Trp Ile Asn Thr			
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Gln Glu Leu Glu Tyr Arg Gly Glu Ser Leu Leu Cys Ser Leu Ile Phe			
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His Leu Lys Thr Phe Phe Asn Leu Asp Ser Ile Asp Met Ala Leu Ser			
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Leu Tyr Arg Ser Phe Tyr Arg Arg Thr Pro Asp Phe Leu Thr Glu Ala			
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Leu Gln Asp Lys Leu Gln Asp Leu Pro Asp Asp Arg Leu Asn Lys			
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Phe Leu Thr Cys Ile Ile Thr Phe Asp Lys Asn Pro Asn Ala Glu			
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Phe Val Thr Leu Met Arg Asp Pro Gln Ala Leu Gly Ser Glu Arg			
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Gln Ala Lys Ile Thr Ser Glu Ile Asn Arg Leu Ala Val Thr Glu			
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Val Leu Ser Ile Ala Pro Asn Lys Ile Phe Ser Lys Ser Ala Gln			
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His Tyr Thr Thr Thr Glu Ile Asp Leu Asn Asp Ile Met Gln Asn			
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Ile Glu Pro Thr Tyr Pro His Gly Leu Arg Val Val Tyr Glu Ser			
1115	1120	1125	
Leu Pro Phe Tyr Lys Ala Glu Lys Ile Val Asn Leu Ile Ser Gly			
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Thr Lys Ser Ile Thr Asn Ile Leu Glu Lys Thr Ser Ala Ile Asp			
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Thr Thr Asp Ile Asn Arg Ala Thr Asp Met Met Arg Lys Asn Ile			
1160	1165	1170	
Thr Leu Leu Ile Arg Ile Leu Pro Leu Asp Cys Asn Lys Asp Lys			
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Thr	Ser	Thr	Ile	Ala	Ser	Gly	Ile	Ile	Ile	Glu	Lys	Tyr	Asn	Val
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Tyr	Thr	Ser Asn Leu Phe	Tyr Ile Ser Tyr Asn	Phe Ser Asp Asn
	1670	1675	1680	
Thr	His	Leu Leu Thr Lys	Gln Ile Arg Ile Ala	Asn Ser Glu Leu
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Glu	Asn	Asn Tyr Asn Lys	Leu Tyr His Pro Thr	Pro Glu Thr Leu
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Ser	Asn	Gln Leu Tyr Thr	Thr Thr Ser His Gln	Thr Ser Leu Val
	1790	1795	1800	
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Val	Val	Glu Leu His Pro	Asp Ile Arg Tyr Ile	Tyr Arg Ser Leu
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Lys	Asp	Cys Asn Asp His	Ser Leu Pro Ile Glu	Phe Leu Arg Leu
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Tyr	Asn	Gly His Ile Asn	Ile Asp Tyr Gly Glu	Asn Leu Thr Ile
	1895	1900	1905	
Pro	Ala	Thr Asp Ala Thr	Asn Asn Ile His Trp	Ser Tyr Leu His
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Leu	Pro	Val Thr Ala Asn	Trp Ser Lys Ile Ile	Ile Glu Trp Ser
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Lys	His	Val Arg Lys Cys	Lys Tyr Cys Ser Ser	Val Asn Arg Cys
	1955	1960	1965	
Ile	Leu	Ile Ala Lys Tyr	His Ala Gln Asp Asp	Ile Asp Phe Lys
	1970	1975	1980	
Leu	Asp	Asn Ile Thr Ile	Leu Lys Thr Tyr Val	Cys Leu Gly Ser
	1985	1990	1995	
Lys	Leu	Lys Gly Ser Glu	Val Tyr Leu Val Leu	Thr Ile Gly Pro
	2000	2005	2010	
Ser	Asn	Ile Leu Pro Val	Phe Asn Val Val Gln	Asn Ala Lys Leu
	2015	2020	2025	
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Glu	Arg	Val	Ser	Ser	Ile	Gln	Pro	Thr	Thr	Thr	Ser	Pro	Ile	His	
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Asp	Asp	Tyr	His	Phe	Glu	Val	Phe	Asn	Phe	Val	Pro	Cys	Ser	Ile	Cys
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Glu	Gly	Asp	Thr	Ser	Thr	Ser	Gln	Ser	Thr	Val	Leu	Asp	Thr	Thr	Thr
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